Recent Papers by IBM Authors

Reprints of the papers listed here may usually be obtained most efficiently by writing directly to the authors. The authors' IBM divisions and locations are identified as follows: ASDD is the Advanced Systems Development Division; CD, Components Division; DPD, Data Processing Division; FED, Field Engineering Division; FSD, Federal Systems Division; GSD, General Systems Division; OPD, Office Products Division; RES Research Division; SDD, Systems Development Division; SMD, Systems Manufacturing Division; and WTC, World Trade Corporation.

• *Papers are listed alphabetically by name of journal*

Symmetrical Vending of Multicore Circular Sandwich Plates, F. Abdulhadi (GSD Rochester, Minn.), *AIAA Journal* **9,** No. 11, 2278–2280 (November, 1971).

Fast Fourier Transform, A. J. Jones (SDD Endicott, N.Y.), *APL Quote-Quad* **III,** Nos. 2 & 3, 52–53 (October 1, 1971).

Spatial Pulse Modulation, A. W. Lohmann (Univ. California, San Diego) and H. W. Werlich (RES San Jose, Ca.), *Applied Optics* **10,** No. 12, 2743–2753 (December, 1971).

Optical Guided Wave Mode Conversion by an Acoustic Surface Wave, L. Kuhn, P. Heidrich and E. Lean (RES Yorktown Hts., N.Y.), *Applied Physics Letters* **19,** No. 10, 428–430 (November 15, 1971).

Direct Microscopic Simulation of Gunn Domain Phenomena, P. A. Lebwohl and P. J. Price (RES Yorktown Hts., N.Y.), *Applied Physics Letters* **19,** No. 12, 530–532 (December 15, 1971).

Some Aspects of pH and Temperature Dependence of the NMR Spectra of Cytochrome C, R. K. Gupta and S. H. Koenig (RES Yorktown Hts., N.Y.), *Biochemical and Biophysical Research Communications* **45,** No. 5, 1134–1143 (1971).

Il Rilevamento Fotogrammetrico della Cupola di S. Maria del Fiore in Firenze (Photogrammetric Survey of the Cupola di S. Maria del Fiore in Florence), W. Ferri (Officine Galileo, Florence), M. Fondelli (Florence University), P. Franchi and F. Greco (WTC Scientific Center, Pisa, Italy), *Bollettino di Geodesia e Scienze Affini* (IGM, Florence) **30,** No. 3, 159–222 (July, August, September, 1971).

Photokinetics in Single-Crystal Cuprous Oxide, J. D. Schick (CD E. Fishkill, N.Y.) and D. Trivich (Wayne State Univ., Detroit, Mich.), *Chemical Physics Letters* **10,** No. 4, 465–467 (August, 1971).

Studies of Effects of Hydrogen Bonding on Orientational Relaxation using Picosecond Pulses, T. J. Chuang and K. B. Eisenthal (RES San Jose, Ca), *Chemical Physics Letters* **11,** No. 3, 368–370 (October 15, 1971).

Scattering Measurements, Second Virial Coefficients, and the Interatomic Potential for Argon, J. A. Barker (RES San Jose, Ca.) and M. L. Klein (National Research Council of Canada, Ottawa, Ont.), *Chemical Physics Letters* **11,** No. 4, 501–503 (November 1, 1971).

Computer Improvement of Anger Camera Images, A. D. Waxman (DPD Scientific Center, Los Angeles, Ca.), J. K. Siemsen (Univ. of S. California Medical Center, Los Angeles, Ca.), E. Efron (DPD Los Angeles, Ca.) and J. Wright (DPD Scientific Center, Los Angeles, Ca), *Computers and Biomedical Research* **4,** No. 5, 548–554 (October, 1971).

A Note on Unconditional Fixed-h Stability of Linear Multistep Formulae, F. Odeh and W. Liniger (RES Yorktown Hts., N.Y.), *Computing* **7,** Nos. 3–4, 240–253 (1971).

Hybrid Glass-Metal Dewar for Optical Studies, E. Haupt and J. J. Wynne (RES Yorktown Hts., N.Y.), *Cryogenics* **11,** No. 5, 411–412 (October, 1971).

De Ludi Natura: Liber Secundus (Concerning the Nature of the Game: Book II), L. J. Endicott, Jr. and P. J. Huyck (SDD Raleigh, N.C.), *Datamation* **17,** No. 23, 32–36 (December 1, 1971).

Trapezoidal Plate Springs, R. A. Sebrosky (SDD Raleigh, N.C.), *Design News* **26,** No. 12, 46–50 (June 21, 1971).

Testing With Magnetic Tape: An Efficient Route to Reliability in Data Processing Machines, S. Lipman (SMD Poughkeepsie, N.Y.) *Digital Design* **1,** No. 1, 68–71 (November, 1971).

Untuned Frequency Doubler Has Low Distortion, E. Winz (SDD Raleigh, N.C.), *EDN/EEE* **16,** No. 15, 39–40 (August 1, 1971).

Start Logic Designs with Flow Diagrams, T. N. Criscimagna (SDD Kingston, N.Y.), *Electronic Design* **19,** No. 25, 56–59 (December 9, 1971).

Constructing the Primitive Flow Table, M. P. Marcus (SDD Endicott, N.Y.), *Electronic Design* **19,** No. 25, 62–64 (December 9, 1971).

How to Live with CRT Arcing, G. L. Smith (SDD Boulder, Co.), *Electro-optical Systems Design* **3,** No. 11, 14–18 (November, 1971).

Eine Idee wird Wirklichkeit—Markteinführung eines neuen Produkts mittels Netzplantechnik (An Idea becomes Fact—Critical Path Method for Introducing a New Product on the Market), W. Brodbeck and K. Barisch (SDD Böeblingen, Germany), *Europa-Revue* **1971,** No. 2, 12–15 (June, 1971).

Anwendung der Bewegungsgleichungs-Methode auf das Spektrum von Superfluidem Helium (Application of the Equation of Motion Method to the Spectrum of Superfluid Helium), C. P. Enz* (RES Zürich, Switzerland), *Helvetica Physica Acta* **44,** No. 5, 552 (August 15, 1971).
*Present address: University of Geneva, Switzerland.

On the Transverse Response of the Electron Gas, N. Szabo (Institut für Theoretische Physik, Johann Wolfgang Goethe Universität, Frankfurt, Germany) and T. Schneider (RES Zürich, Switzerland), *Helvetica Physica Acta* **44,** No. 5, 571 (August 15, 1971).

Evaluation of an Interactive-batch System Network, W. S. Hobgood (RES Yorktown Hts., N.Y.), *IBM Systems Journal* **11,** No. 1, 2–15 (1972).

Readings in Microprogramming, P. M. Davies (SRI New York, N.Y.), *IBM Systems Journal* **11,** No. 1, 16–40 (1972).

System Aspects of Large-problem Computation and Display, J. E. Fromm and D. E. Schreiber (RES San Jose, Ca.), *IBM Systems Journal* **11,** No. 1, 41–55 (1972).

Chief Programmer Team Management of Production Programming, F. T. Baker (FSD Gaithersburg, Md.), *IBM Systems Journal* **11,** No. 1, 56–73 (1972).

Accounting Control of Data Processing, R. C. Rettus (DPD San Francisco, Ca.) and R. A. Smith (Consultant, Sausalito, Calif.), *IBM Systems Journal* **11,** No. 1, 74–92 (1972).

Formation of Self-Trapped Filaments by Self-Focusing, E. Courtens (RES Zürich, Switzerland) *IEEE Journal of Quantum Electronics* **QE-7,** No. 12, 578–579 (December, 1971).

Automatic Word Recognition, G. L. Clapper (SDD Raleigh, N.C.), *IEEE Spectrum* **8,** No. 8, 57–69 (August, 1971).

Two Statistical Feature Evaluation Techniques Applied to Speaker Identification, W. S. Mohn Jr. (SDD Raleigh, N.C.), *IEEE Transactions on Computers* **C-20,** No. 9, 979–987 (September, 1971).

Techniques for Efficient Coding of Features in Pattern Recognition, J. E. Shoenfelt (N.C. State University, Raleigh, N.C.), C. C. Tappert (SDD Raleigh, N.C. and N.C. State University), and A. J. Goetze (N.C. State University), *IEEE Transactions on Computers* **C-20,** No. 9, 1104–1106 (September 1971).

Feature Selection with a Linear Dependence Measure, S. K. Das (SDD Raleigh, N.C.), *IEEE Transactions on Computers* **C-20,** No. 9, 1106–1109 (September, 1971).

Cause-Effect Analysis for Multiple Fault Detection in Combinatorial Networks, D. C. Bossen and S. J. Hong (SDD Poughkeepsie, N.Y.), *IEEE Transactions on Computers* **C-20,** No. 11, 1252–1257 (November, 1971).

Boolean Difference for Fault Detection in Asynchronous Sequential Machines, M. Y. Hsiao and D. K. Chia (SDD Poughkeepsie, N.Y.), *IEEE Transactions on Computers* **C-20,** No. 11, 1356–1361 (November, 1971).

A Heuristic Procedure for the Partitioning and Mapping of Computer Logic Graphs, R. L. Russo, P. H. Oden and P. K. Wolff, Sr. (RES Yorktown Hts., N.Y.), *IEEE Transactions on Computers* **C-20,** No. 12, 1455–1462 (December, 1971).

On a Pin versus Block Relationship for Partitions of Logic Graphs, B. S. Landman and R. L. Russo (RES Yorktown Hts., N.Y.), *IEEE Transactions on Computers* **C-20,** No. 12, 1469–1479 (December, 1971).

An Interactive System for Reading Unformatted Printed Text, R. N. Ascher, G. Koppelman, M. Miller, G. Nagy and G. Shelton (RES Yorktown Hts., N.Y.), *IEEE Transactions on Computers* **C-20,** No. 12, 1527–1543 (December, 1971).

Noise Temperature in Silicon in the Hot Electron Region, W. Bachtold (RES Zürich, Switzerland), *IEEE Transactions on Electron Devices* **ED-18,** No. 12, 1186–1187 (December, 1971).

Magneto-Optic Bubble Domain Devices, G. S. Almasi (RES Yorktown Hts., N.Y.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 370–373 (September, 1971).

Magnetic and Magneto-Optical Properties of Sputtered Fe_5Si_3 Films, E. Sawatzky (RES San Jose, Ca.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 374–376 (September, 1971).

The Structural Stability and Magneto-Optical Properties of the NiAs Phase of the Manganese-Antimony System, E. Sawatzky and G. B. Street (RES San Jose, Ca.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 377–380 (September, 1971).

Preparation of Doped EuO Films on Rotating Discs, K. Lee and J. C. Suits (RES San Jose, Ca.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 391 (September, 1971).

Preparation and Properties of EuS Films and Effects of Fe Doping, K. Y. Ahn and M. W. Shafer (RES Yorktown Hts., N.Y.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 394–396 (September, 1971).

Possible Uses of Charge Transfer Devices and Magnetic Domain Devices in Memory Hierarchies, W. Anacker (RES Yorktown Hts., N.Y.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 410–415 (September, 1971).

On Optimal Processing of Digital Magnetic Recording Data, H. Kobayashi (RES Yorktown Hts., N.Y.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 422 (September, 1971).

New Coding Approach to Digital Magnetic Recording, H. Kobayashi and D. T. Tang (RES Yorktown Hts., N.Y.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 422–423 (September, 1971).

A Cryogenic Disc File, A. M. Patlach (RES San Jose, Ca.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 423 (September, 1971).

Preparation of Fine Particle Rare-Earth Orthoferrites, W. J. Schuele (CD Burlington, Vt.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 471–473 (September, 1971).

Magnetooptic Storage, G. J. Fan (RES Yorktown Hts., N.Y.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 590–594 (September, 1971).

Josephson Junctions with Nb-Al Composite Electrodes, R. B. Laibowitz and A. F. Mayadas (RES Yorktown Hts., N.Y.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 590–594 (September, 1971).

Disturb Mechanisms in Coupled-Film Bulk Memory Elements, R. R. Troutman (CD Burlington, Vt.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 640–643 (September, 1971).

Dynamic Behavior of Domain Walls in Yttrium-Gallium-Iron Garnets, L. L. Rosier and B. A. Calhoun (RES Yorktown Hts., N.Y.), *IEEE Transactions on Magnetics* **MAG-7,** No. 3, 747–748 (September, 1971).

Storage Hierarchies: Gaps, Cliffs, and Trends, E. W. Pugh (RES Yorktown Hts., N.Y.), *IEEE Transactions on Magnetics* **MAG-7,** No. 4, 810–814 (December, 1971).

Evaluation of Multilevel Memories, R. L. Mattson (RES San Jose, Ca.), *IEEE Transactions on Magnetics* **MAG-7,** No. 4, 814–819 (December, 1971).

Two-Photon Conductivity in ZnS and CdS, A. Cingolani, F. Ferrero, and A. Minafra (Univ. Bari, Italy) and D. Trigiante (WTC Scientific Center, Bari, Italy), *Il Nuovo Cimento* **4B,** Anno 117, Serie 11, 217–224 (August 11, 1971).

The Complexity of Skewlinear Tuple Languages and O-regular Languages, W. Juich (SDD Vienna, Austria), *Information and Control* **19,** No. 4, 353–367 (November, 1971).

A Software System for the Automatic Recognition of Bubble Chamber Events, K. Brokate, R. Erbe, E. Keppel, D. Kropp (WTC Scientific Center, Heidelberg, Germany) E. Grimm, H. Schneider and J. Wells (Institut für Hochenergiephysik der Universität Heidelberg), *Instruments and Methods* **96,** No. 1, 157–171 (1971).

Photoisomerization of Linear 1,3-Dienes to Cyclopropane Derivatives, R. Srinivasan (RES Yorktown Hts., N.Y.), *Journal of the American Chemical Society* **93,** No. 22, 5606–5610 (November 3, 1971).

Self-Consistent Field Wave Functions of P_2 and PO, and the Role of d Functions in Chemical Bonding and of s-p Hybridization in N_2 and P_2, R. S. Mulliken (Univ. of Chicago) and B. Liu (RES San Jose, Ca.), *Journal of the American Chemical Society* **93,** No. 25, 6738–6744 (December 15, 1971).

Statistical Metallurgical Model for Electromigration Failure in Aluminum Thin Film Conductors, M. Attardo, R. Rutledge and R. C. Jack (CD E. Fishkill, N.Y.), *Journal of Applied Physics* **42,** No. 11, 4343–4349 (October, 1971).

The Switching and Memory Characteristics of ZnSe-Ge Heterojunctions, H. J. Hovel and J. J. Urgell (RES Yorktown Hts., N.Y.), *Journal of Applied Physics* **42,** No. 12, 5076–5083 (November, 1971).

Imperfect Misfit Dislocations in Thin Films of Silver on Palladium, J. W. Matthews (RES Yorktown Hts., N.Y.), *Journal of Applied Physics* **42,** No. 13, 5640–5643 (December, 1971).

Void Formation and Growth during Electromigration in Thin Films, R. Rosenberg (RES Yorktown Hts., N.Y.) and M. Ohring (Stevens Institute, Hoboken, N.J.), *Journal of Applied Physics* **42,** No. 13, 5671–5679 (December, 1971).

A Determination of the Magnetization of Micromagnetic Wall in Bubble Domains by Direct Minimization, Y. O. Tu (RES Yorktown Hts., N.Y.), *Journal of Applied Physics* **42,** No. 13, 5704–5709 (December, 1971).

Sputter Deposition of EuO Thin Films, J. W. Coburn and K. Lee (RES San Jose, Ca.), *Journal of Applied Physics* **42,** No. 13, 5903–5905 (December, 1971).

The Application of Thermogravimetric Analysis to an Electrophoretically Deposited Polymer Coating, S. L. Levine and H. F. Bell (SDD Poughkeepsie, N.Y.), *Journal of Applied Polymer Science* **15,** No. 5, 1287–1292 (May, 1971).

A Note on Some Mathematical Models of Time-Sharing Systems, I. Adiri (RES Yorktown Hts., N.Y.), *Journal of the Association for Computing Machinery* **18,** No. 4, 611–615 (October, 1971).

Vacuum-Ultraviolet Lasing Action Observed in Co: 1800–2000 Å, R. T. Hodgson (RES Yorktown Hts., N.Y.), *Journal of Chemical Physics* **55,** No. 11, 5378–5379 (December 1, 1971).

Higher Resolution NMR of Rare Spins in Solids, H. E. Bleich and A. G. Redfield (RES Yorktown Hts., N.Y.), *Journal of Chemical Physics* **55,** No. 11, 5405–5406 (December 1, 1971).

Chemical Shift Anisotropy of ^{13}C in Solid Benzene, C. S. Yannoni (RES San Jose, Ca.) and H. E. Bleich (Rockefeller Univ.), *Journal of Chemical Physics* **55,** No. 11, 5406–5407 (December 1, 1971).

Interface Equilibrium Concentrations During Diffusion, S. M. Hu (CD E. Fishkill, N.Y.), *Journal of the Electrochemical Society* **118,** No. 11, 1770–1771 (November 1971).

A Study of the Dissolution of SiO_2 in Acidic Fluoride Solution, J. S. Judge (CD E. Fishkill, N.Y.*), *Journal of the Electrochemical Society* **118,** No. 11, 1772–1775 (November, 1971).
*Currently employed by Micro-Bit Corp., Lexington, Mass.

Electrodeposition of Resins at Soluble Metal Anodes, E. P. Damm, Jr. and S. L. Phillips (SDD Poughkeepsie, N.Y.), *Journal of the Electrochemical Society* **118,** No. 12, 1916–1919 (December, 1971).

Pseudo-Brewster-Angle Determination of Carrier Concentration, W. A. Keenan and P. A. Schumann, Jr. (CD E. Fishkill, N.Y.), *Journal of the Electrochemical Society* **118,** No. 12, 2010–2014 (December, 1971).

Sodium Borohydride ($NaBH_4$) Initiation of Electroless Plating, D. G. McBride and G. P. Vlasak (CD Endicott, N.Y.), *Journal of the Electrochemical Society* **118,** No. 12, 2055–2058 (December, 1971).

Finite Waiting Space Bulk Service System, V. P. Singh (CD E. Fishkill, N.Y.), *Journal of Engineering* **5,** No. 4, 241–248 (October, 1971).

Statistical Properties of the Noise Output Current, V. P. Singh and H. Y. Hsieh (CD E. Fishkill, N.Y.), *Journal of Engineering* **5,** No. 4, 249–255 (October, 1971).

A Model for the Local Mode Relaxation Process in Poly (ethylene Terephthalate), E. Sacher (SDD Endicott, N.Y.), *Journal of Macromolecular Science-Physics* **B5,** No. 4, 739–744 (December, 1971).

Optimal and Suboptimal Capacity Allocation in Communication Networks, W. Oettli (RES Zürich, Switzerland) and W. Prager (Brown Univ., Providence, R.I.) *Journal of Optimization Theory and Applications* **8,** No. 5, 396–411 (November, 1971).

Fracture of Polymers in Biaxial and Triaxial Tension, T. L. Smith (RES San Jose, Ca.), *Journal of Polymer Science, Part C. Polymer Symposia* **32,** 269–282 (1971).

Measuring Surface Variations With The Scanning Electron Microscope Using Deposited Contamination Lines, R. A. Hoover (CD E. Fishkill, N.Y.), *Journal of Scientific Instruments* **4,** No. 10, 747–749 (October, 1971).

Halide Doping of Ferromagnetic Europium Chalcogenides, M. W. Shafer (RES Yorktown Hts., N.Y.), *Journal of Solid State Chemistry* **3,** No. 4, 505–509 (November, 1971).

Flame Test Methods for Plastics, R. J. Wiktorek (SDD Endicott, N.Y.), *Materials Engineering* **74,** No. 5, 56–59 (October, 1971).

On the Nature of Phase Transitions and Nomenclature, H. Gränicher (Swiss Federal Institute of Technology, Zurich) and K. A. Müller (RES Zurich, Switzerland), *Materials Research Bulletin* **6,** No. 10, 977–988 (October, 1971).

Direct Observation of Voids in Doped Tungsten by Scanning Electron Microscopy, G. Das (CD E. Fishkill, N.Y.), *Metallurgical Transactions* **2,** No. 11, 3239–3241 (November, 1971).

Using Product Line Universal Modeling System, J. Ryan (SMD Kingston, N.Y.), *Metals Engineering Quarterly* **11,** No. 4, 56–59 (November, 1971).

A Software System for the Automatic Recognition of Bubble Chamber Events, K. Brokate, R. Erbe, E. Keppel, D. Kropp (WTC Scientific Center, Heidelberg, Germany) E. Grimm, H. Schneider and J. Wells (Institut für Hochenergiephysik der Universität Heidelberg), *Nuclear Instruments and Methods* **96,** No. 1, 157–171 (1971).

New Dimensions for an Old Optical Inspection Technique, B. Gagnon (SDD Boulder, Co.), *Optical Spectra* **5,** No. 9, 26–27 (November, 1971).

Stimulated Thermal Scattering of Light, I. P. Batra (RES San Jose, Ca.), R. H. Enns (Simon Fraser Univ., Burnaby, B. C., Canada) and D. Pohl (RES Zurich, Switzerland), *Physica Status Solidi* **48,** No. 1, 11–63 (November, 1971).

The Magnetic Properties of $LaSn_3$, L. B. Welsh (Northwestern Univ., Evanston, Ill.), A. M. Toxen and R. J. Gambino (RES Yorktown Hts., N.Y.), *Physical Review* **B4,** No. 9, 2921–2931 (November 1, 1971).

Exciton Bands in Antiferromagnetic Cr_2O_3, R. M. Macfarlane (RES San Jose, Ca.) and J. W. Allen (MIT, Cambridge, Mass.) *Physical Review* **B4,** No. 9, 3054–3067 (November 1, 1971).

Self-Consistent Treatment of the Frequency Spectrum of a Model Paraelectric, N. S. Gillis (Sandia Laboratories, Albuquerque, N.M.) and T. R. Koehler (RES San Jose, Ca.), *Physical Review* **B4,** No. 11, 3971–3982 (December 1, 1971).

Magnetic Transitions in a Degenerate Band, K.-A. Chao (RES Yorktown Hts., N.Y.), *Physical Review* **B4,** No. 11, 4034–4046 (December 1, 1971).

Theory of Work-Function Changes Induced by Alkali Adsorption, N. D. Lang (RES Yorktown Hts., N.Y.), *Physical Review* **B4,** No. 12, 4234–4245 (December 15, 1971).

Photoemission Measurements of the Valence Levels of Amorphous SiO_2, T. H. DiStefano and D. E. Eastman (RES Yorktown Hts., N.Y.), *Physical Review Letters* **27,** No. 23, 1560–1562 (December 6, 1971).

Comparison of Air and Water Pollution Instrumentation, L. A. Rittmiller, B. Zomkowski (SMD Kingston, N.Y.), and I. L. Wadehra (SDD Kingston), *Pollution Engineering* **3,** No. 6, 26–28 (November/December, 1971).

Use These Tables to Design with Long-Addendum Pinions, J. P. Dombrowski (SDD Raleigh, N.C.), *Power Transmission Design* **14,** No. 9, 75–80 (September, 1971).

Power and Energy Limitations in Magnetic Bubble Devices, R. W. Keyes (RES Yorktown Hts., N.Y.), *Proceedings of the IEEE* **59,** No. 10, 1528–1530 (October, 1971).

The Effects of Advance Information on Human Information Processing in a Choice Reaction Task, J. Remington (SDD Raleigh, N.C.), *Psychonomic Science* **24,** No. 4, 171–173 (1971).

Review of Principles of Crystal Structure, D. Sayre (RES Yorktown Hts., N.Y.), *Quarterly of Applied Mathematics* **29,** No. 1, 165–166 (April, 1971).

Diagrams at 1:1 from Draft to Camera, W. C. Dunn (SDD Endicott, N.Y.), *Reprographics* **9,** No. 6, 24–26 (October, 1971).

A Multi-Contact Probe for Dielectric Strength Measurements of an Array of MOS Capacitors, R. Hammer (RES Yorktown Hts., N.Y.), *Review of Scientific Instruments* **42,** No. 10, 1542–1543 (October, 1971).

Windowless Photoelectron Spectrometer for High Resolution Studies of Solids and Surfaces, J. K. Cashion, J. L. Mees, D. Eastman (RES Yorktown Hts., N.Y.), J. A. Simpson and C. E. Kuyatt (National Bureau of Standards, Gaithersburg, Md.), *Review of Scientific Instruments* **42,** No. 11, 1670–1674 (November, 1971).

Electro-Mechanical Feedback Control for Lang Topography, J. Angilello and C. Wood (RES Yorktown Hts., N.Y.), *Review of Scientific Instruments* **42,** No. 11, 1709–1711 (November, 1971).

A Mechanism for the Formulation of Helices and Loops at Precipitate Particles, J. W. Matthews (RES Yorktown Hts., N.Y.), *Scripta Metallurgica* **5,** No. 12, 1053–1056 (December, 1971).

Recursive Identification of Linear Systems, J. Rissanen (RES San Jose, Ca.), *SIAM Journal on Control* **9,** No. 3, 420–430 (August, 1971).

A Survey of Parallelism in Numerical Analysis, W. L. Miranker (RES Yorktown Hts., N.Y.), *SIAM Review* **13,** No. 4, 524–547 (October, 1971).

Hot Electron Distributions by Direct Integration of the Boltzmann Equation, P. A. Lebwohl and P. M. Marcus (RES Yorktown Hts., N.Y.), *Solid State Communications* **9,** No. 19, 1671–1674 (October 1, 1971).

Doping Dependence of the Barrier Heights of Palladium-Silicon Schottky Diodes, R. F. Broom (RES Zürich, Switzerland), *Solid-State Electronics* **14,** No. 11, 1087–1092 (November, 1971).

Dynamic Bulk Negative Differential Conductivity in Semiconductors, J. C. McGroddy (RES Yorktown Hts., N.Y.) and P. Guéret (RES Zurich, Switzerland), *Solid-State Electronics* **14,** No. 12, 1219–1224 (December, 1971).

Semiconductor Sùperlattice, V. L. Rideout, L. Esaki and A. E. Blakeslee (RES Yorktown Hts., N.Y.), *Solid State Technology* **14,** No. 5, 14 (May, 1971).

Computer Controlled Growth of Single-Crystal Ingots, K. E. Domey (CD E. Fishkill, N.Y.), *Solid State Technology* **14,** No. 10, 41–45 (October, 1971).

The Development of Polyimide Multilayer Boards Containing Integral Flexible Circuitry, J. R. Cannizaro (FSD Owego, N.Y.), *Solid State Technology* **14,** No. 11, 27–33 (November, 1971).

Characterization of Laser Trimmed Thick Film Resistors, R. T. Howard (FSD Huntsville, Al.), *Solid State Technology* **14,** No. 11, 39–45 (November, 1971).

A Confidence Interval for the Lognormal Hazard, C. F. Jones (CD E. Fishkill, N.Y.) *Technometrics* **13,** No. 4, 885–888 (November, 1971).

Cis and Trans Links in Natural Channel Networks, J. S. Smart and J. R. Wallis (RES Yorktown Hts., N.Y.), *Water Resources Research* **7,** No. 5, 1346–1348 (October, 1971).

Comments on "Application of Linear Random Models to Four Annual Streamflow Series," B. B. Mandelbrot (RES Yorktown Hts., N.Y.), *Water Resources Research* **7,** No. 5, 1360–1362 (October, 1971).